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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,048	07/17/2003	Randy L. Ekl	CM05154H	2270
22917	7590	02/08/2005	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			JAIN, RAJ K	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,048

Applicant(s) AK

EKL ET AL.

Examiner

Raj K Jain

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Wejke et al (US005175867A) in view of Rom (US006360264B1).

Regarding claims 1, 9 and 13, Wejke discloses a method for call handoff in a wireless communications system from a serving cell to neighboring cell. The method comprising the steps of,

- at the base station: receiving a first transmission at a first signal quality from the mobile station (see Fig 4, col 9 lines 23-25, the serving base station receives the first signal quality from a base station);

- receiving a second transmission that indicates a second signal quality at which a second base station is receiving transmissions from the mobile station (see Fig 5, col 9 lines 49-52, the second transmission indicating the second signal quality is received by the neighboring base station or the second base station from the mobile station),

- comparing the first signal quality with the second signal quality (see col 8 lines 43-47, the MSC within a given serving area compares the signal qualities or strengths of the mobiles between different base stations);

-and when the second signal quality is greater than the first signal quality, signaling the second base station to initiate a handoff with the mobile station (see Fig 5, col 8 lines 60-65, col 10 lines 20-30, the MSC compares and determines the strength or quality of the second signal and then initiates a handoff order to the second base station if the second signal quality is greater than the first).

Wejke discloses a mobile assisted handoff within a cellular communications system, however, Wejke fails to disclose access points performing the handoff within a communications system.

Rom discloses access points 13 for inter-cell communications in order to maintain connectivity of nodes in a wireless system (Fig 1).

Access points or base stations serve to provide a reassociation process without losing connectivity between serving cells in a wireless communications system by relaying packets into and out of a given serving area without break in service to the user, mobile or node (see Figs 1, 2A, 3, col 4 lines 38-64). Because an access point is analogous to a base station, the terminology with respect to cells and sectors is the same as with respect to voice systems. Access points communicate with other access points when initiating a handoff and therefore do not require the additional functionality of a MSC for handoff procedures as is required within typical base station systems.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize access points instead of possibly base stations for handoff purposes as taught by Rom within Wejke thereby reducing or eliminating the need for MSC's to initiate a handoff request procedure.

Regarding claims 2 and 19, Wejke discloses wireless communications which is packet oriented and handoff initiation is performed by the second base station or access point when the signal quality is higher than the predetermined threshold (see Fig 5, col 8 lines 60-65, col 10 lines 20-30, the MSC compares and determines the strength or quality of the second signal and then initiates a handoff order to the second base station if the second signal quality is greater than the first).

Regarding claims 3 and 12, Wejke discloses second transmission from the second base station or access point (see col 9 line 50).

Regarding claims 4, 8, 10, 14 Wejke discloses receiving a third transmission that indicates a third signal quality at which the mobile station is receiving transmissions from the second access point (see col 10 lines 25-30, the third signal is handoff control to the mobile from the second base station).

Regarding claims 5, 11, Wejke discloses the step of signaling performed when the third signal quality exceeds a threshold (see col 10 lines 20-25).

Regarding claim 6, Wejke discloses third transmission further indicating a fourth signal quality at which the mobile station is receiving transmissions from the first access point (see col 2 lines 40-55, the fourth signal indicating disassociation with current base station once handoff is initiated).

Regarding claim 7, Wejke discloses third signal from second base station to mobile, which it has accepted for handoff, and forth signal is weak signal from original serving base station to mobile for disassociation (see col 2 lines 40-55).

Regarding claim 14, Wejke discloses first and second signal qualities received from first transmission from the mobile (see col 9 line 25-30), and third signal is received from second transmission from second base station (see col 10 line 20-25).

Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wejke et al (US005175867A) in view of Rom (US006360264B1).

Regarding claim 15, Wejke discloses a method for call handoff in a wireless communications system from a serving cell to neighboring cell. The method comprising the steps of,

- receiving a first transmission at a given signal quality from the mobile station (see Fig 4, col 9 lines 23-25, the serving base station receives the first signal quality from a base station);

- receiving a second transmission that indicates a second signal quality at which a second base station is receiving transmissions from the mobile station (see Fig 5, col 9 lines 49-52, the second transmission indicating the second signal quality is received by the neighboring base station or the second base station from the mobile station),

- signaling the first access point or base station with the given signal quality in which the transmission was received from the mobile station when the given signal quality exceeds a predetermined threshold (see 202 Fig 4, col 9 lines 25-30, the base station monitors and determines if the signal exceeds a predetermined threshold);

- and sending a transmission to the mobile station to disassociate with the first access point when a handoff trigger is received within a predetermined time period from

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the first access point (see Fig 4, col 9 lines 30-35, the handoff request is sent from the neighboring access point once the predetermined threshold is exceeded see col 10 lines 5-30).

Wejke discloses a mobile assisted handoff within a cellular communications system, however, Wejke fails to disclose access points performing the handoff within a communications system.

Rom discloses access points 13 for inter-cell communications in order to maintain connectivity of nodes in a wireless system (Fig 1).

Access points or base stations serve to provide a reassociation process without losing connectivity between serving cells in a wireless communications system by relaying packets into and out of a given serving area without break in service to the user, mobile or node (see Figs 1, 2A, 3, col 4 lines 38-64). Because an access point is analogous to a base station, the terminology with respect to cells and sectors is the same as with respect to voice systems. Access points communicate with other access points when initiating a handoff and therefore do not require the additional functionality of a MSC for handoff procedures as is required within typical base station systems.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize access points instead of possibly base stations for handoff purposes as taught by Rom within Wejke thereby reducing or eliminating the need for MSC's to initiate a handoff request procedure.

Regarding claim 16, Wejke discloses that the threshold values for each access point may be varied and may be more than one (see col 9 lines 56-67).

Regarding claims 17 and 18, Wejke discloses messaging as part of the control function sent in conjunction with signaling between mobile and base stations (see col 4 lines 52-56, col 7 lines 55-65).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj Jain whose telephone number is 571-272-3145. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 571-272-3134. The fax phone number for the organization where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

RJ
January 26, 2005

